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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,156	09/17/2003	Norio Kimura	2003_1332	4176

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WASHINGTON, DC 20006-1021

EXAMINER

GRANT, ALVIN J

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,156

Applicant(s)

KIMURA ET AL.

Examiner

Alvin J Grant

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/622,638.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/31/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiyama EP 0 754 525 A1.

Hiyama discloses a method of polishing a workpiece in a polishing apparatus, comprising: conditioning a polishing surface by a contact type dresser for initial conditioning before starting using the polishing surface, polishing a workpiece by bringing the workpiece into contact with the polishing surface after the conditioning, and dressing the polishing surface after the polishing by a non-contact type dresser for removing ground-off particles of the workpiece; the non-contact dresser and the contact type dresser are provided in the polishing apparatus; the non-contact type dresser comprises a plurality of fluid jet nozzles; the pressure of each of the nozzle is variable; the contact type dresser comprises a diamond dresser; the polishing surface is dressed by the contact type dresser before the dressing of the polishing surface by the non-contact type dresser; the non-contact and contact type dresser are angularly movable to a standby position located outwardly of the polishing surface; and attaching a member having a polishing surface to a table, conditioning the polishing surface by a contact type dresser for initial conditioning before starting using the polishing surface, polishing

Art Unit: 3723

workpieces repeatedly by bringing each of the workpieces into contact with the polishing surface after the conditioning while supplying an abrasive liquid in the polishing, and dressing the polishing surface between the polishing of the workpieces by a non-contact type dresser for removing ground-off particles of the workpieces (column 6, lines 2-22; and Fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-9, 11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varian et al. '010.

Referring to claims 1-3, 5, 6, 9, 11, and 13-15, Varian et al. does not specifically disclose dressing the polishing cloth with a first dressing unit having a contact-type dresser; and then dressing the polishing cloth with a second dressing unit having a non-contact type dresser. Instead, Varian et al. discloses a method of polishing a workpiece in a polishing apparatus, comprising: dressing a polishing cloth with a first dressing unit having a non-contact type dresser which is a fluid jet, and then dressing the polishing cloth with a second dressing unit having a contact-type dresser; the non-contact type dresser comprises a plurality of fluid jet nozzles for ejecting fluid jets; and the contact type dresser comprises a diamond dresser. However, Varian et al. states that other

process sequences may be implemented (see column 4, lines 51-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Varian et al. by dressing the polishing cloth with a first dressing unit having a contact-type dresser since clearly this would be another process sequence that may be implemented appropriately.

Referring claims 7 and 8, Varian et al. discloses that the fluid jet arms are angularly movable. The capability of the arm to be movable to a standby position is inherent in the design of the apparatus since the apparatus does not perform conditioning exclusively and therefore will have to standby to facilitate other activities. Hence it is a process sequence that may be implemented appropriately.

Claims 4, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varian et al. in view of Gonzalez-Martin et al. '897.

Varian et al. as modified is described above. The modified Varian et al. does not specifically disclose a variable pressure nozzles or a vacuum system for holding the workpiece eventhough Varian et al. discloses a vacuum system for removing debris from the pad surface. Gonzalez-Martin et al. discloses a CMP apparatus which uses variable pressure nozzles so as to supply conditioning fluid with differing forces, and a vacuum system for holding the workpiece. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the apparatus of Varian et al. to have variable pressure nozzles and a vacuum system as taught by Gonzales-Martin et al. so as to respectively supply conditioning fluid with differing forces and secure the workpiece.

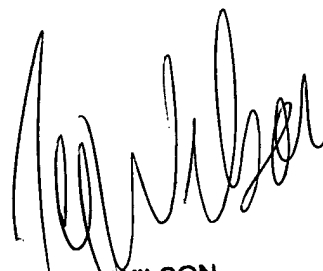
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J Grant whose telephone number is (703) 305-3315. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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LEE D. WILSON
PRIMARY EXAMINER